

# J50 Series Compact Heavy Duty Joystick



For more information about this product, visit our website at:  
[www.potentiometers.com](http://www.potentiometers.com)



## *J50 Series Compact Heavy Duty Joystick* *Heavy Duty Joystick Series*

### Features

- One, Two, or Three Axis Joystick (X,Y, Z)
- 4" handle height
- 60° deflection angle ( $\pm 30^\circ$ )
- Many knob options, ball knob standard
- Spring return to center
- Circular deflection pattern
- 10K ohm precision potentiometer
- Protective rubber boot
- IP65 rating above panel
- Panel mounting bracket

### Options

- Single Axis (X); Three Axis (X, Y, Z)
- Square limiter plate
- Cross (+) limiter plate
- Friction clutch (holds position, replaces spring return)
- Non-standard resistance
- Center detent
- Center-tapped pots
- Dual gang pots
- Inductive (non contacting) pots
- Sealed pots
- Dual direction switches
- Single direction switch; Center detect switch
- Push button handle; Tapered handle
- Without boot; without mounting plate

### Electrical Specifications

Resistance: 10K Ohms Conductive Plastic  
Resistance Tolerance:  $\pm 15\%$   
Independent Linearity:  $\pm 3.0\%$   
Power Rating: (X, Y) 0.2 watt  
Lever Electrical Angle: (X,Y) - 60°  
Resolution: Essentially infinite  
Output Smoothness: Below 0.2% against input voltage  
Contact Resistance Variation: Below 5%  
Insulation Resistance: 1000 Meg@500VDC  
Dielectric Strength: 1 minute @ 500 VAC  
Max. Wiper Output: 5mA, 1ma rec.

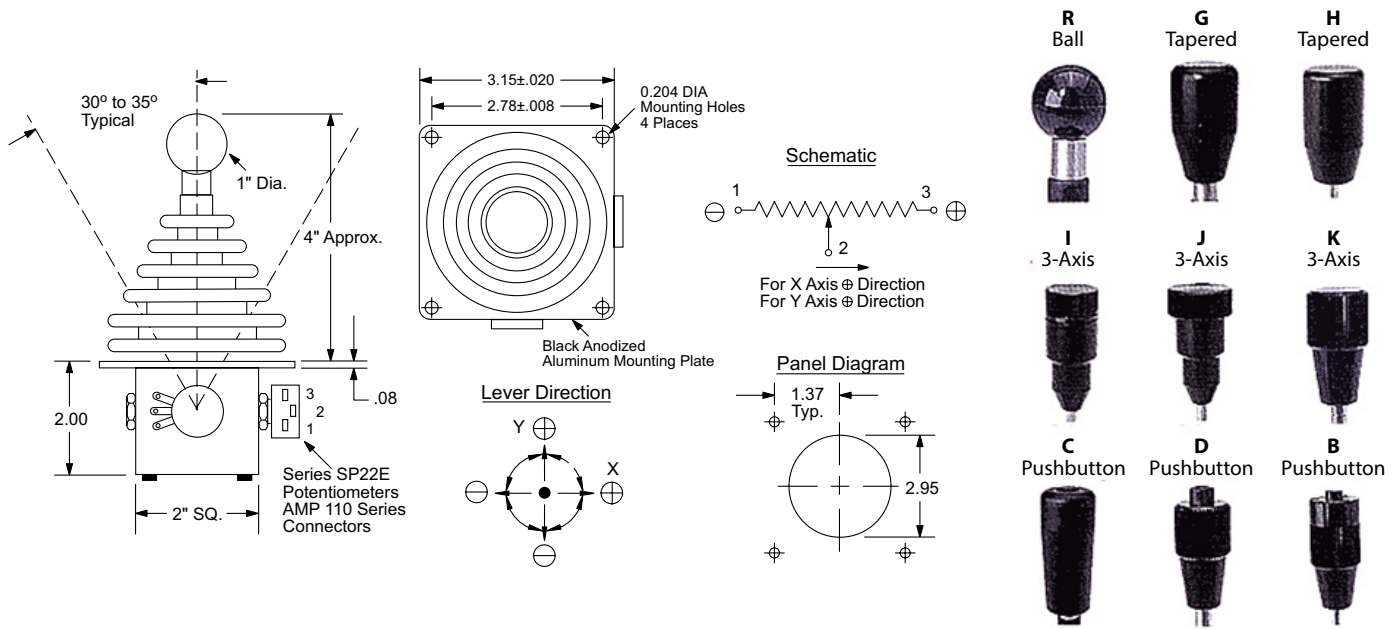
### Mechanical Specifications

Lever Deflection (X,Y):  $\pm 30^\circ$  to  $\pm 35^\circ$   
Operating Force (X, Y): 10.79 to 53.95 oz-F  
Housing: Aluminum  
Knob Material: Hard plastic  
Weight: Approx 11 oz  
Service Life: 5,000,000 operations

### Environmental Specifications

Operating Temperature: -20°C to +65°C  
Rating: IP 65 Above Panel

# J50 Series Compact Heavy Duty Joystick



## Ordering Information

Example Part Number: **J50-2-R-Single-CD**

<p><b>J50</b></p> <p>Model</p> <p><b>J50</b></p>	<p><b>2</b></p> <p>Axis</p> <p><b>3</b> = 3 axis (X,Y,Z)  <b>2</b> = 2 axis (X,Y) (standard)  <b>1</b> = Single axis (X)</p>	<p><b>R</b></p> <p>Knob</p> <p><b>R</b> = Circular Ball style R (standard)  <b>B</b> = Push button handle style B  <b>C</b> = Push button handle style C  <b>D</b> = Push button handle style D  <b>G</b> = Tapered handle style G  <b>H</b> = Tapered handle style H  <b>I</b> = 3-axis handle style I  <b>J</b> = 3-axis handle style J  <b>K</b> = 3-axis handle style K</p>	<p><b>Single</b></p> <p>Switch</p> <p><b>None</b> = No switch  <b>Single</b> = Single direction switch  <b>Dual</b> = Dual direction switches  <b>Center</b> = Center detect switch</p>	<p><b>CD</b></p> <p>Limiters</p> <p><b>FR</b> = Friction clutch (holds position, replaces spring return)  <b>CD</b> = Center Detent  <b>NS</b> = Non-standard resistance  <b>CT</b> = Center Tapped pots  <b>DG</b> = Dual Gang pots  <b>IP</b> = Inductive (non contacting) pots  <b>SP</b> = Sealed potentiometers  <b>WB</b> = Without boot  <b>WM</b> = Without Mounting Plate</p>
		<p><b>None</b> = Circular deflection - no limiter plate (standard)  <b>Square</b>  <b>Cross (+)</b></p> <p>Black Anodized Aluminum Mounting Plate</p>		

For more information about this product, visit our website at: [www.potentiometers.com](http://www.potentiometers.com)

